HEIL

DeLuxe

AIR CONDITIONING UNIT

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A COMPLETELY AUTOMATIC AIR CONDITIONING UNIT

Air conditioning for the home — that fascinating subject which has been widely publicized, but only vaguely understood by the layman, now becomes a practical reality! The Heil DeLuxe Air Conditioning Unit performs all of the operations necessary for proper air conditioning, at an operating cost so low that every homeowner can afford it. This scientifically designed Heil unit is entirely self-contained and responds automatically to sensitive controls to maintain the exact degree of home comfort desired.

● Definition of Heil Air Conditioning

A central air conditioning system installed in a home for year around service must provide for: (1) winter air conditioning and (2) summer air conditioning. This means that during the winter heating season the air within the home must be filtered, heated, humidified and circulated. During the hot summer months, when desired, the same conditioning unit must furnish filtered, dehumidified, cooled, circulated air.

The Heil DeLuxe Air Conditioning Unit is furnished for complete winter air conditioning service. If summer cooling is desired, the necessary additional equipment can be incorporated when the original installation is made or at any future time. In most cases where the prevailing water service temperature is below 56 degrees, running water can be used for summer cooling. Where the water temperature is above 56 degrees, refrigeration is recommended for proper summer conditioning.

● Component Parts of the Heil DeLuxe Conditioner

The Heil DeLuxe Air Conditioning Unit is a complete heating and Air Conditioning system "All-In-One," consisting of the following assemblies: (1) A specially designed all-welded Heil steel furnace, having long flue-travel and large heating surfaces; (2) an efficient Heil Oil Burner; (3) large capacity, quiet operating, air circulation fan; (4) replaceable filters; (5) large capacity, automatically regulated humidifier.

These component parts are arranged in a compact assembly and encased in an attractive, rectangular jacket which occupies a floor space area of only 43 inches by 73 inches. Within this cabinet are performed, automatically, all of the necessary conditioning operations!

The installation of the Heil DeLuxe Air Conditioner is simple and efficient. The complete conditioning unit is erected in a suitable location and connected with the living rooms of the home by ducts through which the conditioned air is transmitted to the outlet registers properly placed in each room. Return ducts, placed in the base-boards, direct the circulating air back to the conditioning unit to be filtered, heated, humidified and recirculated. This complete conditioning cycle continues automatically, day and night throughout the heating season to maintain the proper degree of comfort desired!

● The Air Is Filtered

The Heil DeLuxe Air Conditioning Unit actually filters every cubic inch of air within the home every ten minutes. Just think what this means from the standpoint of greater cleanliness and better health. Large capacity filters in the Heil Conditioner remove dust, lint and foreign particles from the air as it passes through—not once or twice a day, but every ten minutes all of the air within the home is **filtered!**

Homeowners are amazed at the amount of dust and other impurities that cling to the Heil filters and which, with ordinary heating methods, would constantly circulate throughout the home to be continually deposited on furniture, drapes and floors!

● The Air Is Heated

The Heil DeLuxe Air Conditioning Unit is equipped with a scientifically designed, all-welded Heil steel furnace. The circulating air scrubs along large heating surfaces and quickly absorbs all usable heat energy generated in the combustion chamber by the efficient Heil oil burner. The unusual design of this Heil furnace insures a high efficiency rating which gives positive assurance of exceptionally low fuel cost.

● The Air Is Humidified

Physicians will verify the fact that dry air, which is prevalent in most homes during the heating season, is a contributing cause of winter colds and other related ailments. Here again the Heil DeLuxe Air Conditioning Unit provides for better health and greater comfort by supplying every room in the home with circulating air, properly humidified! A large capacity humidifier, mounted on the heating unit, evaporates moisture into the warmed, circulating air stream and automatically maintains the proper humidity.

● The System of Tomorrow for Homes of Today!

The Heil DeLuxe Air Conditioning Unit is the conditioning system of tomorrow for homes of today! Not only does this Heil Conditioner provide for maximum comfort and promote better health, but of equal importance it protects the homeowner's investment. It is a proven fact that a home equipped with a Heil Air Conditioning Unit is easier to sell or rent than a home equipped with an ordinary heating system!

Why not decide now to invest in a Heil DeLuxe Air Conditioning Unit? If you are about to build a new home, specify a Heil DeLuxe Conditioning System. If you are modernizing your home, replace your present heating system with a Heil DeLuxe Conditioner!

★ HEIL

DeLuxe

AIR CONDITIONING UNIT

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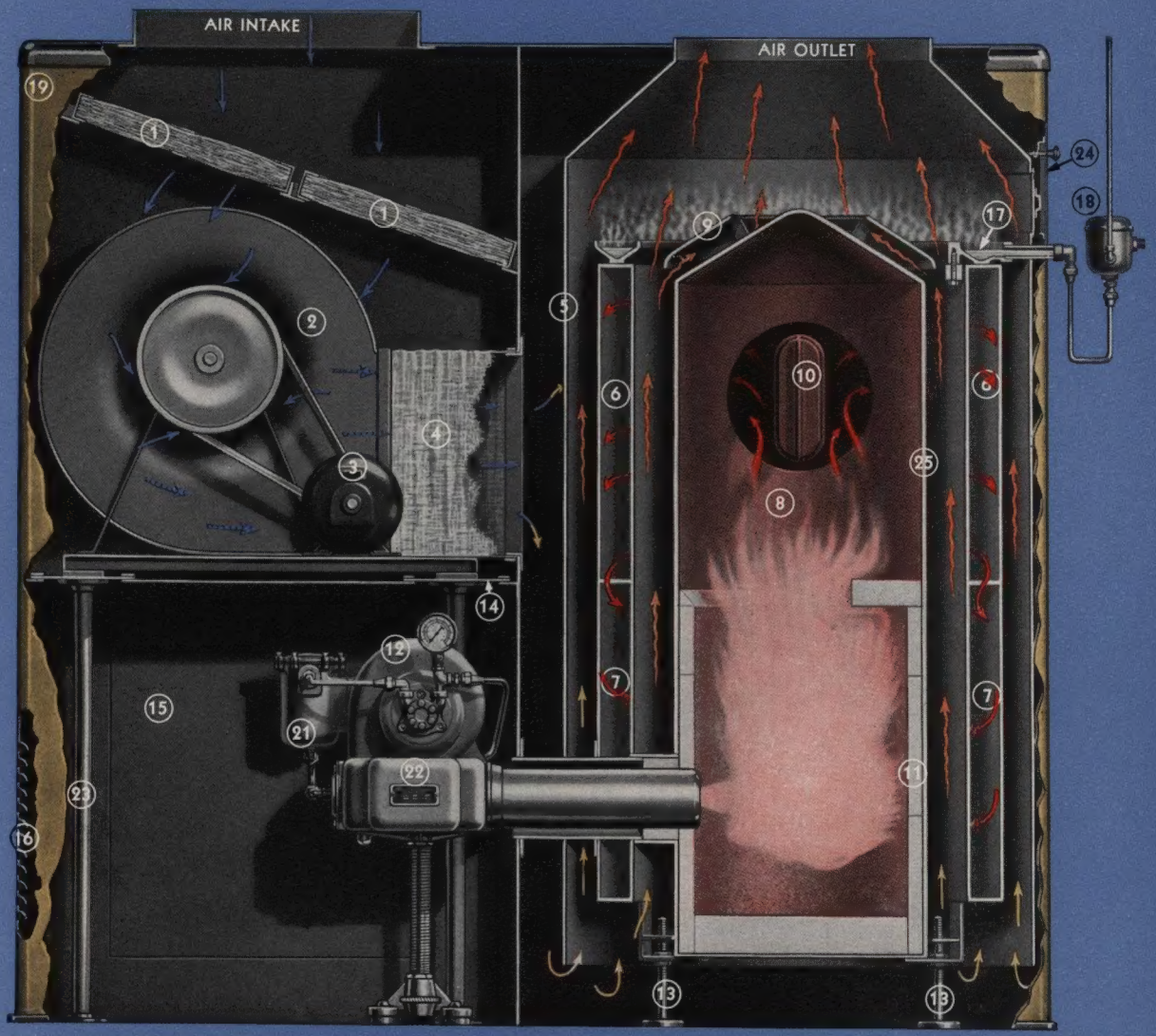


1. REPLACEABLE FILTERS
2. AIR CIRCULATION FAN
3. ELECTRIC MOTOR
4. VIBRATION-PROOF CONNECTOR
5. INNER CASING
6. PRIMARY RADIATOR
7. SECONDARY RADIATOR
8. COMBUSTION CHAMBER
9. DEFLECTION HOOD
10. DOMESTIC WATER HEATER
11. HIGH TEMPERATURE REFRACTORY
12. HEIL COMBUSTION OIL BURNER
13. ADJUSTABLE LEGS
14. VIBRATION-PROOF MOUNTING
15. INSPECTION DOOR
16. AIR INTAKE LOUVERS
17. CIRCULAR HUMIDIFIER
18. HUMIDIFIER AUTOMATIC FLOAT VALVE
19. ENAMELED STEEL OUTER JACKET
21. LARGE CAPACITY HEIL OIL STRAINER
22. LIFETIME IGNITION TRANSFORMER
23. BLOWER SUPPORT LEGS
24. HUMIDIFIER INSPECTION DOOR
25. ALL-WELDED STEEL FURNACE SHELL

CONSTRUCTION FEATURES

• The Heating Unit

The heating unit furnished with the Heil DeLuxe Conditioner consists of: A scientifically designed Heil oil burning furnace and an efficient Heil Oil Burner. The furnace is a cylindrical, steel combustion chamber completely encircled by a steel radiator that is divided by a horizontal, internal plate into a top and bottom section. The hot gasses of combustion, generated in the combustion chamber, rise and pass through a flue into the top section of the circular radiator. Here the hot gasses divide and travel forward around the top section, then drop down and around through the bottom section, and back to the smoke outlet at the rear. During this long, slow travel all usable heat units in the hot gasses are transferred to the circulating air scrubbing along the outside walls and only enough heat to maintain proper draft is allowed to pass into the chimney. The remarkably low fuel cost records that have been established by Heil DeLuxe Conditioners is due to the extra large heating surfaces and long flue travel of the heating unit.

• The Humidifier

A large capacity, cylindrical, cast-iron water ring, mounted on top of the radiator, evaporates the desired amount of moisture into the heated air stream. An automatic float-valve maintains the correct water level at all times. The water in the Heil humidifier is brought to the boiling point by heat absorbed directly from the furnace instead of robbing heat from the circulating air. This insures positive humidification at all times.

• The Circulation Fan

A dynamically balanced, quiet operating fan furnishes the motive power to maintain a flow of air circulating through the Heil Air Conditioning Unit. The air is drawn from the living rooms into the Conditioning Unit where it is filtered and injected into the heating chamber. Air entering the heating chamber is pre-heated by the inner casing as it flows down toward the floor of the chamber on its way to the primary heating surfaces of the furnace. This pre-heated air enters the inner and outer cylindrical flues (formed by the concentric combustion chamber and the radiator) and scrubs upward along the hot, steel walls absorbing all usable heat energy. As the air reaches the top of the heating surfaces it picks up the proper amount of evaporated water from the humidifier and flows on upward through the outlet, into the duct system, where it is directed to every room in the home. Dampers installed in the various room ducts can be adjusted to balance the complete installation so that every room, regardless of location, receives the proper amount of heat.

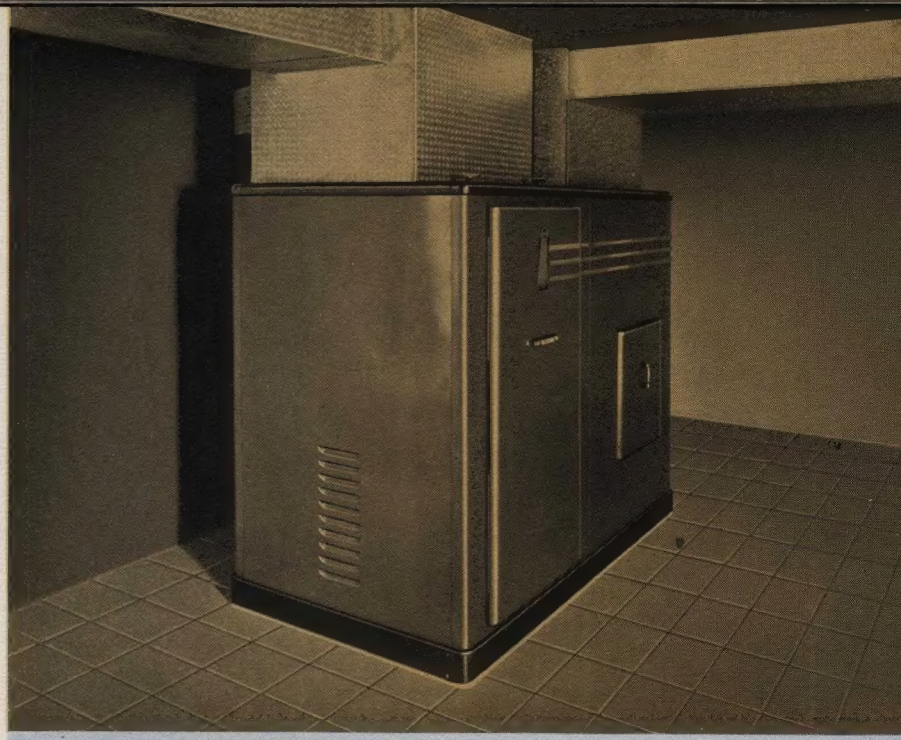
• The Filters

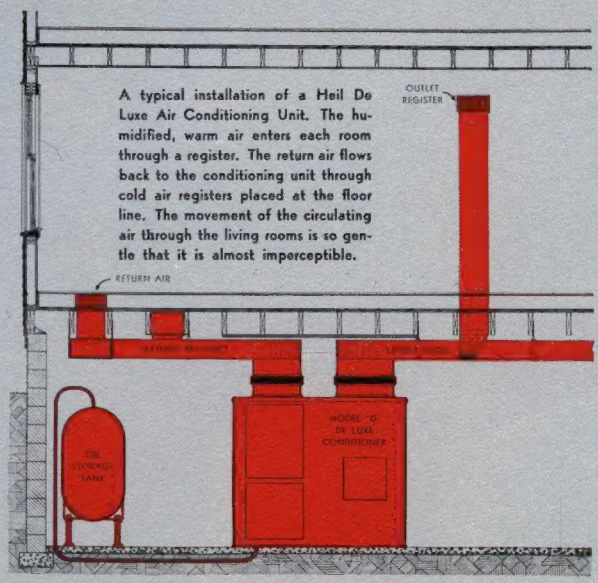
All return air entering the Heil Air Conditioning Unit passes through large capacity filters which remove dust and impurities. These filters are readily accessible for periodic inspection and can be replaced easily and inexpensively when they become dust-laden.

• The Oil Burner

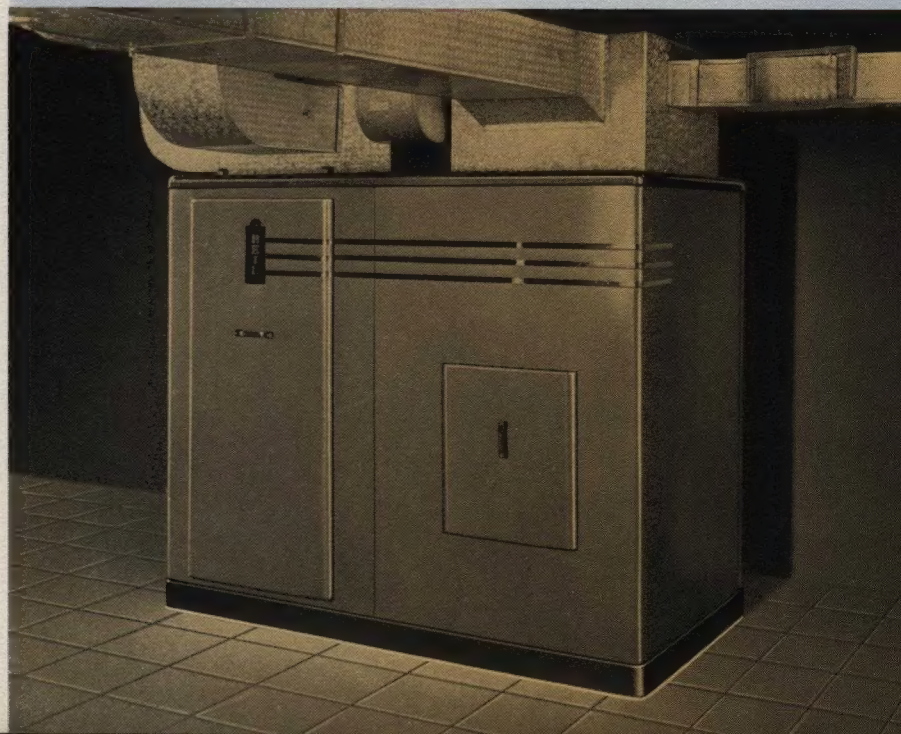
The Heil Air Conditioning Unit is equipped with a dependable Heil Oil Burner. This efficient burner uses the inexpensive, heavier grades of fuel-oil and produces a soft, hot, effective flame in the combustion chamber.

All of these component assemblies of the Heil DeLuxe Air Conditioning Unit perform their individual functions with clock-like precision to insure maximum operating efficiency and minimum operating cost.





A typical installation of a Heil De Luxe Air Conditioning Unit. The humidified, warm air enters each room through a register. The return air flows back to the conditioning unit through cold air registers placed at the floor line. The movement of the circulating air through the living rooms is so gentle that it is almost imperceptible.



A MODERN AIR CONDITIONING SYSTEM FOR HOMES

Just as the automobile revolutionized transportation methods almost overnight, so also has air conditioning completely revolutionized the methods of tempering and conditioning the air within our homes. To keep pace with the rapid public acceptance of air conditioning The Heil Co. has perfected a specially designed, self-contained unit that performs all of the necessary air conditioning operations quietly, automatically and efficiently. This bulletin presents the construction and operating features of the Heil DeLuxe Air Conditioning Unit — — the modern air conditioning system for homes!

The complete Heil Air Conditioning Unit occupies a floor space area of only 73 inches by 43 inches.

The Efficient Heil DeLuxe Air Conditioning Unit is encased in an attractive, enameled steel jacket.

Use Burner & Furnace about 90 to 100, 00. $400.
Total not over $700. prob. $625.

EFFICIENT HEIL DELUXE MODEL "O" AIR CONDITIONING UNIT

FURNACE No. "O" DELUXE

Capacity.....120,000 B.T.U. per Hour
Overall Width .....28½"
Overall Length .....44"
Overall Height .....48"
Size of Chimney Recommended .12"x12" or 9" dia. x 30'
Hot Water Heating Coil.....Special Fin Type
Refractory Combustion Chamber.

FILTERS

Filter Area (net) Replacement Type .....1500 Sq. In.

HUMIDIFIER

Humidifier.....Float Control Type
Humidistat .....Hair Type
Standard Evaporating Capacity of Humidifier.....10 Lbs. per Hour (1.2 G.P.H.)

BURNER — MODEL ISS — Model X Optional

Gallons of Oil Burned per Hour..... 1.35
Thermostat ....Heat Acceleration

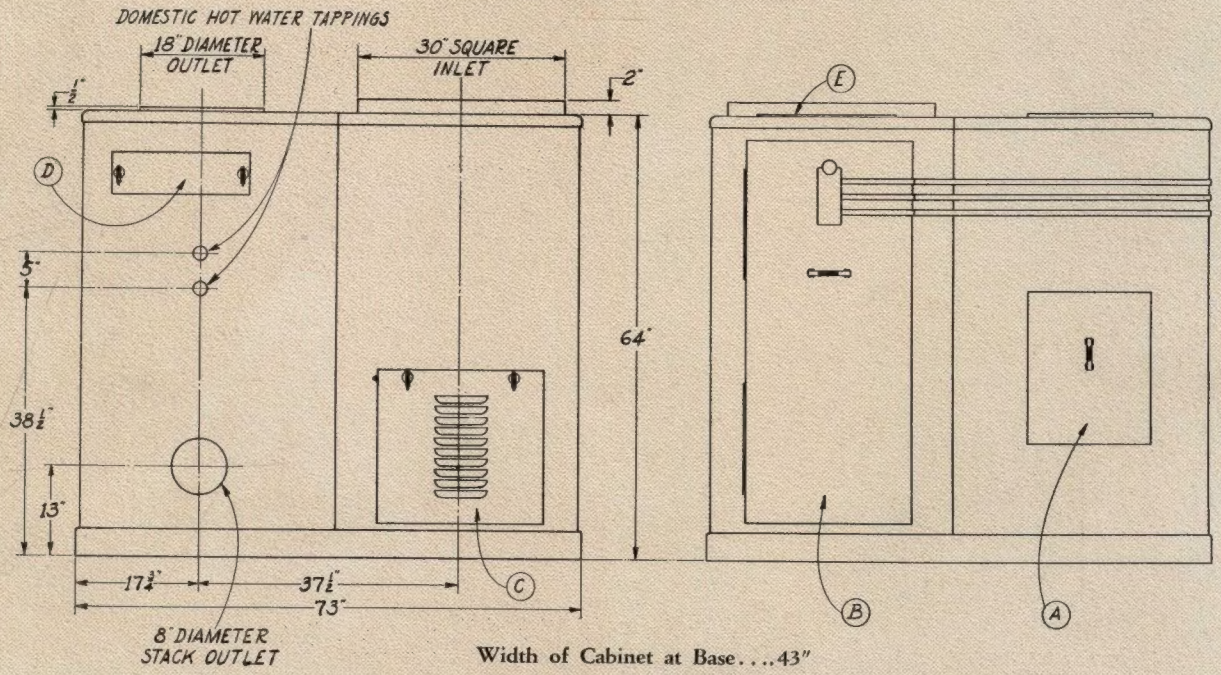
BLOWER

Maximum Blower Output CFM at $\frac{1}{16}$" Water Static Pressure.....2600
Maximum Blower Output at $\frac{3}{8}$" Water Static Pressure.....1600
Multivane Blower with Variable Speed Pulley; Maximum R.P.M. 500
Motor Size—110 V., 60 Cycle, 1750 R.P.M., Split Phase.....¼ H.P.
Drive (Motor to Blower).....V-Belt
Blower Wheel.....Statically and Dynamically Balanced

SHIPPING WEIGHT

Complete with Refractory, Water Coil, Burner and Controls.....1550 Lbs.
Shipping Weight of Burner..... 135 Lbs.

For prices covering above equipment see current price list.



Width of Cabinet at Base....43"

A—Combustion chamber inspection door.
B—Inspection door for removing and cleaning filters.
C—Burner inspection door.
D—Humidifier inspection door.
E—Removable cover for summer cooling.

Manufactured by: THE HEIL CO., 3000 W. Montana Street, Milwaukee, Wis.

The Heil Co. manufactures: Heil Combustion Oil Burners; Boiler-Burner Units; Furnace Burner Units; Air Conditioners; Hoists—Bodies and Tanks; Stainless Steel Tanks; Bottle Washers; Dehydrators; Scrapers; Trailbuilders; Individual Water Systems . . Write for literature.

THE HEIL CO.

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PHONE: POPLAR 3985-6

THE HEIL CO., Eastern Factory — **Route #29, Hillside, New Jersey**

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